

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/052146 A3**

(51) International Patent Classification<sup>7</sup>: C12N 15/53, 9/64

(21) International Application Number:  
PCT/US2004/039066

(22) International Filing Date:  
19 November 2004 (19.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/523,609 19 November 2003 (19.11.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

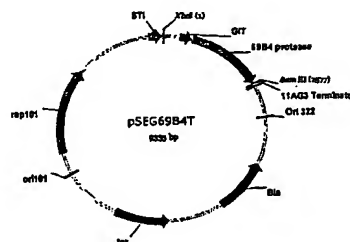
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
10 November 2005

[Continued on next page]

(54) Title: SERINE PROTEASES, NUCLEIC ACIDS ENCODING SERINE ENZYMES AND VECTORS AND HOST CELLS INCORPORATING SAME



(57) Abstract: The present invention provides novel serine proteases, novel genetic material encoding these enzymes, and proteolytic proteins obtained from Micrococcineae spp., including but not limited to Cellulomonas spp. and variant proteins developed therefrom. In particular, the present invention provides protease compositions obtained from a Cellulomonas spp. DNA encoding the protease, vectors comprising the DNA encoding the protease, host cells transformed with the vector DNA, and an enzyme produced by the host cells. The present invention also provides cleaning compositions (e.g., detergent compositions), animal feed compositions, and textile and leather processing compositions comprising protease(s) obtained from a Micrococcineae spp., including but not limited to Cellulomonas spp. In alternative embodiments, the present invention provides mutant (i.e., variant) proteases derived from the wild-type proteases described herein. These mutant proteases also find use in numerous applications.

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